UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/646,940	08/21/2003	J. Patrick Thompson	MSFT-1750/302726.01	1753

41505 7590 02/28/2006	EXAMINER
WOODCOCK WASHBURN LLP (MICROSOFT CORPORATION) ONE LIBERTY PLACE - 46TH FLOOR PHILADELPHIA, PA 19103	LY, CHEYNE D

ART UNIT	PAPER NUMBER
2168	

DATE MAILED: 02/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-35_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-35_ is/are rejected.

7)☒ Claim(s) _8,11,22,24,26,30,31,33 and 35_ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _21 August 2003_ is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____ .

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _February 09, 2004._

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____ .

DETAILED ACTION

1. Claims 1-35 are examined on the merits.

OBJECTIONS

2. The abstract of the disclosure is objected to because of the term ("Items"). Applicant is

required to remove the parentheses and quotation marks. Further, Applicant is required

to submit a new abstract on a separate sheet of paper. See MPEP § 608.01(b).

3. This application filed under 37 CFR 1.78 lacks the necessary reference to the prior

application. Paragraph [0001] of the instant application does not have the current status

of the commonly assigned applications. The current status of the parent nonprovisional

application(s) should be included.

4. The disclosure is objected to because of the phrase "[Remainder of Page Intentionally

Left Blank]" on pages 11, 179, 184, and 191. Appropriate correction is required.

5. Claim 1 is objected to because of the term ("Items"). Applicant is required to remove the

parentheses and quotation marks. The same issue is present in claims 13, 14, and 27.

6. Claims 8, 11, 22, 24, 26, 30, 31, 33, and 35 are objected to because said claims comprises

terms or phrases in parentheses. For example, claim 8, line 2, comprises the phrase "(the

first Item"). Applicant is required to remove the parentheses.

7. Claim 9 is objected to because said claim comprise the term "idunit" in line 3. The term

has been interpreted as missing a space between the letters "d" and "u." Applicant is

required to remove the parentheses. The same issue is present in claims 22 and 31.

CLAIM REJECTIONS - 35 USC § 101

8. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

9. Claims 1-26 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

10. Claims 1-26 are rejected because the claims are directed to the storing of nonfunctional descriptive material being stored in a computer readable medium or system. It is noted that claim 2 recites the limitation of "a base schema...," however, the instant specification does not specifically define said limitation to have " a physical or logical relationship among data elements, designed to support specific data manipulation functions." "When nonfunctional descriptive material is recorded on some computer-readable medium..., it is not statutory" (1300 OG 142, November 22, 2005, Annex IV).

Double Patenting

11. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

12. A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope.

The filing of a terminal disclaimer <u>cannot</u> overcome a double patenting rejection based

upon 35 U.S.C. 101.

13. Claims 1 and 14 are provisionally rejected under 35 U.S.C. 101 as claiming the same

invention as that of claims 1 and 28 of copending Application No. 10/646,632. This is a

<u>provisional</u> double patenting rejection since the conflicting claims have not in fact been

patented.

CLAIM REJECTIONS - 35 USC § 102

14. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on
sale in this country, more than one year prior to the date of application for patent in the United States.

15. Claims 1-12, 14-25, and 27-34 are rejected under 35 U.S.C. 102(b) as being anticipated

by D'Andrea & Janus (1996) (D'Andrea hereafter).

16. It is noted that D'Andrea discloses "four fundamental object extensions...Taken together

with extension #1, class composition, the data model is a Directed Acyclic Graph

(DAG)" (page 71, last paragraph). Further, the citation portion of D'Andrea discloses 4

types of objects (Items) as defined by the instant specification (page 32). The objects

(Items) anticipate the limitations of first and second Items required by the claims as

discussed below. The disclosure anticipates the pluralities of properties and Items of the

claimed invention as discussed below.

17. In regard to claim 1, D'Andrea discloses a computer-readable medium with computer-readable instructions for a hardware/software interface system for a computer system (page 71, lines 4-7), wherein said hardware/software interface system (pages 73-74, Balanced Client-Server Architecture section) manipulates a plurality of discrete units of information having properties understandable by said hardware/software interface system (page 72, 2nd paragraph).

18. In regard to claim 2, the hardware/software interface system comprises a base schema (page 72, line 6) to define at least one or an Item and at least one of a property (page 71, lines 28-36, and page 72, lines 15-22).

19. In regard to claim 3, at least one of an Item in the base schema is a foundational Item (page lines 8-10), constituting a foundational Item type, from which all other items manipulated in the hardware/software interface system are derived (page 71, lines 28-36, and, pages 72-73, DATATYPES section). It is noted that D'Andrea discloses "UniSQL also provides a robust set of multimedia types…GLOs are used for complex objects such as text, HTML, voice, image…etc." which has been interpreted as "from which all other Items manipulated in the hardware/software interface system are derived."

20. In regard to claims 4 and 5, D'Andrea discloses said foundational Item Type comprises a property…(page 71, lines 28-36, and, pages 72-73, OBJECT-ORIENTED DATA MODEL & DATATYPES sections). It is noted that claims 4 and 5 recite the intended use limitation of "a property for…" wherein the intended use does not result in the structural difference between the claimed invention and the prior art. Therefore, the prior art structure has been interpreted as capable of performing the intended use as recited in

the claims. It is noted that the intended use is recited in the body of the claims; however,

the claims are examined as a whole in regard to the prior art rejection.

21. In regard to claim 6, at least one of a property in the base is a foundational property,

constituting a foundational property type, from which all other properties utilized in the

hardware/software interface system are derived (page 71, lines 28-36, and, pages 72-73,

DATATYPES section).

22. In regard to claim 7, at least one of an Item in the base schema is a foundational Item,

constituting a foundational Item type, from which all other items manipulated in the

hardware/software interface system are derived (page 71, lines 28-36, and, pages 72-73,

DATATYPES section); and at least one of a property in the base is a foundational

property, constituting a foundational property type, from which all other properties

utilized in the hardware/software interface system are derived (page 71, lines 28-36, and,

pages 72-73, DATATYPES section).

23. In regard to claim 8, the base schema further comprises a second Item derived from the

foundational Item type (the first Item), said second item constituting the foundational

type for an Item Folder, and said second Item expressing a Relationship to said first item

(page 71, lines 28-36, and, page 73, lines 2-7). It is noted the disclosure of "class" as a

datatype (relationship to the first Item) cited above has been interpreted as the required

"second Item." Further, the instant specification (page 37, [0108]) discloses "groups of

Items can are organized into special Items called Items Folders (which are not to be

confused with file folders)..." Therefore, the disclosure of "class" having inheritance

properties and collection operators including membership, casting, equality, subset, etc.

(page 73, lines 1-7) anticipates the required limitation "Item Folder."

24. In regard to claim 9, the base schema further comprises a second property derived from the foundational property type (the first property), said second property constituting the foundational type for an idunit key property (page 71, lines 28-36, and, page 72, OBJECT-ORIENTED DATA MODEL section).

25. In regard to claim 10, the based schema further comprises a second property derived from the foundational property type (the first property), said second property constituting the foundational type for Categories (page 71, lines 28-36, and, page 72, OBJECT-ORIENTED DATA MODEL section, and page 73, lines 1-7). It is noted the instant specification (page 37, [0109]-[0110]) discloses "Categories based on common described characteristic...a specific immediate or inherited property." D'Andrea discloses "[a]ll objects that have the same attributes and program parts are collectively know as a class" (page 72, OBJECT-ORIENTED DATA MODEL section) and "GLOs...may be specialized through inheritance to meet application-specific requirements (page 73, lines 5-6). Therefore, the discloses by D'Andrea anticipates the required limitation of "Categories."

26. In regard to claim 11, the based schema further comprises a second property derived from the foundational property type (the first property), said second property constituting the foundational type for Categories (page 71, lines 28-36, and, page 72, OBJECT-ORIENTED DATA MODEL section, and page 73, lines 1-7).

27. In regard to claim 12, the based schema further comprises a their property derived from

the second, said third property constituting the foundational type for a Relationship (page

71, lines 4-7, and lines 28-36).

28. In regard to claims 14-25 and 27-34, D'Andrea discloses the method and

hardware/software system as cited above.

Claim Rejections - 35 USC § 103

29. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

30. This application currently names joint inventors. In considering patentability of the

claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the

various claims was commonly owned at the time any inventions covered therein were

made absent any evidence to the contrary. Applicant is advised of the obligation under

37 CFR 1.56 to point out the inventor and invention dates of each claim that was not

commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g)

prior art under 35 U.S.C. 103(a).

31.

32. Claims 13, 26, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over

D'Andrea & Janus (1996) (D'Andrea hereafter) as applied to claims 1-12, 14-25, and 27-

34 above, and further in view of Ip et al. (1991) (Ip hereafter).

33. D'Andrea the limitation to claims 1-12, 14-25, and 27-34 as discussed above. However, D'Andrea does not describe the limitations of "a property (IsOwned) for denoting whether said relationship owns said target item."

34. D'Andrea describes an improvement for the next generation DBMS that is fast and cost-effective by taking advantage of the flexibility, productivity, and performance benefits of OO modeling (Abstract etc.). Ip describes OO modeling based on complex objects in knowledge-based requirement engineering (Abstract etc.). An artisan of ordinary skill in the art at the time of the instant invention would have been motivated by the improvement described by D'Andrea to improve the method of D'Andrea with the OO modeling technique described by Ip.

35. In regard to claims 13, 26, and 35, Ip describes third property constituting the foundational type for a relationship comprise a property (Target) for identifying a target Item of said Relationship and a property (IsOwned) for denoting whether said Relationship owns said target Item (Page 10, Figure 1).

36. Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to use the computer-readable medium, system, and method of D'Andrea with the property for denoting whether said Relationship owns said target Item as described by Ip.
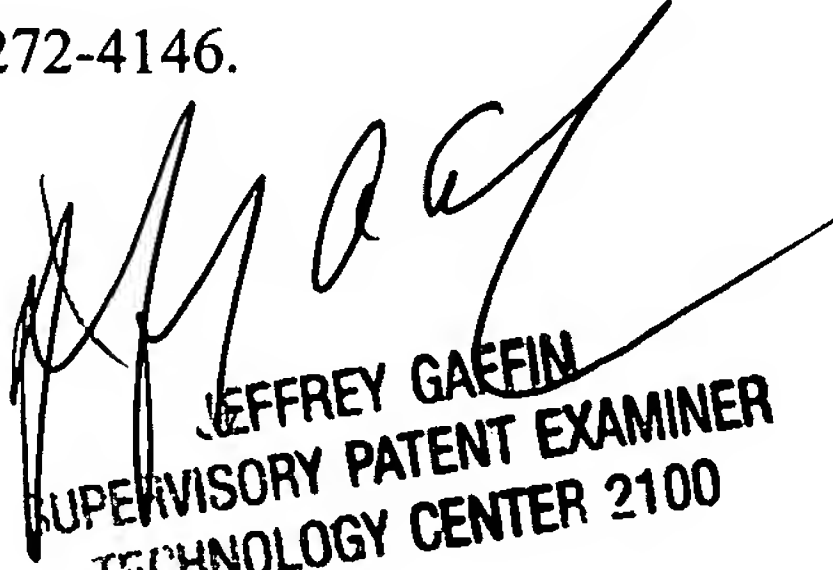
CONCLUSION

37. Patent applicants with problems or questions regarding electronic images that can be viewed in the Patent Application Information Retrieval system (PAIR) can now contact the USPTO's Patent Electronic Business Center (Patent EBC) for assistance.

Representatives are available to answer your questions daily from 6 am to midnight

(EST). The toll free number is (866) 217-9197. When calling please have your

application serial or patent number, the type of document you are having an image

problem with, the number of pages and the specific nature of the problem. The Patent

Electronic Business Center will notify applicants of the resolution of the problem within

5-7 business days. Applicants can also check PAIR to confirm that the problem has been

corrected. The USPTO's Patent Electronic Business Center is a complete service center

supporting all patent business on the Internet. The USPTO's PAIR system provides

Internet-based access to patent application status and history information. It also enables

applicants to view the scanned images of their own application file folder(s) as well as

general patent information available to the public.

38. For all other customer support, please call the USPTO Call Center (UCC) at 800-786-

9199. The USPTO's official fax number is 571-272-8300.

39. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to C. Dune Ly, whose telephone number is (571) 272-0716.

The examiner can normally be reached on Monday-Friday from 8 A.M. to 4 P.M.

40. If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Jeffrey Gaffin, can be reached on (571) 272-4146.

C. Dune Ly
Patent Examiner
2/17/06

JEFFREY GAFFIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100